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- (75) Inventors/Applicants (for US only): **IWATO, Satoko** [JP/JP]; 4-27-8 Jinguumae, Shibuya-ku, Tokyo 150-0001 (JP). **NAKAMURA, Hideo** [JP/JP]; 480-2-2 Kiduki Nakahara-ku, Kawasaki-shi, Kanagawa, Tokyo 211-0025 (JP). **KAKU, Mureo** [JP/JP]; 2-40-7 Toyosatodai, Utsunomiya-shi, Tochigi 320-0003 (JP). **KOSUGE, Kazuhiko** [JP/JP]; 11-11 Hikawacho, Itabashi-ku, Tokyo 173-0013 (JP).
- (54) Title: **ORGANIC FIBERS AND TEXTILE PRODUCTS**
- (57) Abstract: A high-strength, heat-resistant organic fiber and textile product each comprising or having coated thereon an aqueous emulsion is provided. The emulsion comprises or is produced from a fluorocarbon silane or an emulsion, said emulsion comprises or is produced from (1) a fluorocarbon silane or its hydrolyzate, (2) water, and (3) optionally a surfactant, an alkoxysilane compound, catalyst, or combinations of two or more thereof; said fluorocarbon silane having the formula  $R_f-(CH_2)_p-Si\{(O-CH_2CH_2)_n-OR^1\}_3$ ;  $R_f$  is a  $C_{3-18}$  perfluoroalkyl group or combinations of two or more thereof; each  $R^1$  is independently one or more  $C_{1-3}$  alkyl groups;  $p$  is 2 to 4; and  $n$  is 2 to 10. Also disclosed is a process for producing the emulsion, the fiber, and the textile product.
- (74) Agent: **SHAY, Lucas, K.**; E.I. Dupont De Nemours And Company, Legal Patent Records Center, 4417 Lancaster Pike, Wilmington, DE 19805 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
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# INTERNATIONAL SEARCH REPORT

International Application No.

PC 03/26329

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 D06M13/513 D06M15/643 D06M15/657

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 23804 A (DU PONT) 8 September 1995 (1995-09-08) page 8, line 31 -page 9, line 2; claims; examples	1,3-11
X	WO 02 31062 A (IWATO SATOKO ;KAKU MUREO (JP); DU PONT (US)) 18 April 2002 (2002-04-18) page 7, line 22 - line 28; claims	1,2,8
X	WO 01 90267 A (IWATO SATOKO ;KAKU MUREO (JP); DU PONT (US)) 29 November 2001 (2001-11-29) claims	1,2,8

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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